The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A prepress workflow method, comprising:

obtaining a color source image;

generating *N* spot color separations from the color source image, wherein *N* is less than four, the *N* spot color separations, when superimposed, form a reproduction composite image similar in color to the color source image;

screening the *N* spot color separations, wherein at least one of the *N* spot color separations is screened using frequency modulation (FM).

2. The method of Claim 1, wherein the *N* spot color separations are *N* spot color separation positives.

3. The method of Claim 1, wherein the color source image is a photographic image or complex natural image.

4. The method of Claim 3, wherein the color source image is digitally encoded.

5. The method of Claim 1, wherein generating *N* spot color separations further includes

obtaining cyan, magenta, and yellow image separations from the color source image;

obtaining first and second transparent ink spot colors from a color palette, and

assigning the first and second transparent ink spot colors to first and second image separations chosen from the cyan, magenta, and yellow image separations, thereby forming first and second spot color separations.

6. The method of Claim 5, wherein obtaining cyan, magenta, and yellow image separations from the color source image further includes

converting the source image into a CMY source image; and

extracting the C, M, and Y image separations from the CMY source image.

7. The method of Claim 5, obtaining first and second transparent ink spot colors from a color palette further includes

determining visually selected dominant object colors of the color source image; and

obtaining first and second transparent ink spot colors from a color palette which suitably represent the selected dominant object colors.

8. The method of claim 5, wherein assigning the first and second transparent ink spot colors to first and second image separations chosen from the cyan, magenta, and yellow image separations further includes

selecting first and second separations from the cyan, magenta, and yellow image separations which represent the two image separations that carry the most color in the color source image; and

assigning the first and second selected transparent ink spot colors to the first and second image separations, respectively, thereby forming first and second spot color separations.

9. The method of Claim 8, wherein a color relationship exists between the spot color of ink and the image separation.

10. The method of claim 9, wherein the transparent ink spot color chosen for a cyan image separation is a variation of a cyan, blue, or green ink.

11. The method of Claim 9, wherein the transparent ink spot color chosen for a magenta image separation is a variation of red, magenta or orange ink.

12. The method of Claim 9, wherein the transparent ink spot color chosen for a yellow image separation is a variation of yellow, green, or red ink.

13. The method of Claim 5, wherein generating *N* spot color separations further includes:

superimposing the first and second spot color separations to form the reproduction composite image; and

adjusting greyscale values of the two superimposed spot color separations to visually produce an image substantially resembling the original color source image.

14. The method of Claim 13, further including

selecting a spot color similar in color to the printing substrate and including this color as a third separation prior to superposing the first and second spot color separations.

15. The method of claims 13, further including

converting the color source image to L*a*b* encoding, selecting the L* channel, and combining it as a third separation with the two superimposed spot color separations, the third separation rendering an opaque masking color.

16. The method of claim 15, wherein the masking color is laid down as an opaque ink prior to or subsequent the application of the two transparent inks.

17. The method of Claim 1, wherein generating *N* spot color separations further includes

obtaining cyan, magenta, and yellow image separations from the color source image;

determining visually selected dominant object colors of the color source image;

obtaining first and second transparent ink spot colors from a color palette which suitably represent the selected dominant object colors;

selecting first and second image separations from the cyan, magenta, and yellow image separations which represent the two image separations that carry the most color in the color source image; and

assigning the first and second selected transparent ink spot colors to the first and second image separations, respectively, thereby forming first and second spot color separations.

18. The method of claim 1, wherein the color source image is initially adjusted for at least one property selected from the group consisting of contrast, brightness, color balance, and tonal value prior to generating *N* spot color separations.

19. The method of Claim 5, further including

performing global or local greyscale adjustment of each spot color separation by manipulating brightness, contrast and tone.

20. The method of Claim 1, wherein all of the *N* spot color separations are screened using frequency modulation (FM).

21. The method of Claim 1, wherein screening the *N* spot color separations includes

designating the spot color separation conveying the greatest image detail to be a luminance separation;

assigning the remaining spot color separations as chrominance separations; and

screening either the luminance separation or the chrominance separations using frequency modulation.

22. The method of Claim 21, further including

screening the other of the luminance separation or the chrominance separations using amplitude modulation (AM).

23. The method of Claim 1, further including

processing the generated *N* spot color separations to achieve printing misregistration tolerance prior to screening.

24. The method of Claim 23, wherein processing the generated *N* spot color separations to achieve printing misregistration tolerance includes

choosing the generated *N* spot color separation conveying the greatest image detail to be a luminance separation;

assigning remaining separations (*N*-1) as chrominance separations; and

degrading image detail in the chrominance separations.

25. The method of Claim 24, wherein degrading image detail in the chrominance separations includes

processing the chrominance separations through a low pass filter.

26. The method of Claim 24, wherein the low pass filter blurs the separation by attenuating high frequency content.

27. The method of Claim 24, wherein the chrominance separations are degraded globally or locally through the low pass filter.

28. The method of Claim 24, wherein processing the generated *N* spot color separations to achieve printing misregistration tolerance further includes

enhancing image detail in the luminance separation.

29. The method of claim 28, wherein enhancing image detail in the luminance separation includes

processing the luminance separation through a high pass filter.

30. The method of claim 29, wherein the luminance separation is enhanced globally or locally through the high pass filter.

31. A prepress workflow method, comprising:

obtaining a color source image;

generating *N* spot color separations from the color source image, wherein N is less than four;

processing the generated *N* spot color separations to achieve printing misregistration tolerance; and

screening the processed *N* spot color separations, wherein at least one of the *N* spot color separations are screened using frequency modulation (FM).

32. A prepress workflow method, comprising:

generating *N* spot color separation positives of a digital source image, wherein *N* is less than four; and

screening the processed *N* spot color separation positives, wherein at least one of the *N* spot color separation positives is screened using frequency modulation (FM).

33. The method of Claim 32, further including

processing the generated *N* digital spot color separation positives to achieve printing misregistration tolerance prior to screening.

34. The method of Claim 32, further including

initially obtaining the digital source image, the digital source image being in CMY encoded format.

35. The method of Claim 32, wherein generating *N* spot color separation positives of a digital source image further includes

obtaining Cyan, Magenta, Yellow image separation positives from the digital source image;

obtaining first and second transparent ink spot colors from a color palette;

selecting first and second image separation positives from the cyan, magenta, and yellow image separation positives which represent the two image separation positives that carry the most color in the digital source image; and

assigning the first and second selected transparent ink spot colors to the first and second image separation positives, respectively, thereby forming first and second spot color separation separations.

36. The method of Claim 32, wherein screening the processed *N* spot color separation positives includes

inverting the *N* spot color separation positives to create spot color separations prior to screening.

37. A prepress workflow method, comprising:

preparing *N* non-process color separations from a source image;

processing the *N* non-process color separations to achieve printing misregistration tolerance; and

screening the *N* non-process color separations, wherein at least one of the *N* non-process color separations is screened by frequency modulation (FM).

38. The method of Claim 37, wherein processing the generated *N* non-process color separations includes

choosing the non-process color separation conveying the greatest image detail to be a luminance separation;

assigning the remaining non-process color separations as chrominance separations; and

degrading image detail in the chrominance separations.

39. The method of Claim 38, further including

enhancing image detail on the luminance separation.

40. The method of Claim 37, wherein all of the *N* non-process color separations are screened by frequency modulation (FM).

41. The method of Claim 37, wherein screening *N* non-process color separations includes

designating the non-process color separation conveying the greatest image detail to be a luminance separation;

assigning the remaining non-process color separations as chrominance separations; and

screening either the luminance separation or the chrominance separations using frequency modulation (FM).

screening the other of the luminance separation or the chrominance separations using amplitude modulation (AM).